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APPLICATION NO). T	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,805	10/647,805 08/25/2003		Ira Liao	3304.2.81	2355 .
21552	7590	07/18/2005		EXAMINER	
MADSON	V & METO	CALF	TUNG, KEE M		
GATEWA SUITE 900		WEST	ART UNIT	PAPER NUMBER	
15 WEST	SOUTH TI	EMPLE	2671		
SALT LAI	KE CITY,	UT 84101	DATE MAILED: 07/18/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	Applicant(s)					
Office Action Summary			10/647,805	LIAO ET AL.					
			Examiner	Art Unit					
	•		,	i					
	The MAILING DATE of this communi		Kee M. Tung	2671	n address				
Period fo	or Reply	саион арреа	rs on the cover sheet v	viui uie corresponaence	· address				
THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIO nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this commu- period for reply specified above is less than thirty (30 period for reply is specified above, the maximum stat re to reply within the set or extended period for reply reply received by the Office later than three months af ed patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(aunication.) days, a reply witutory period will awill, by statute. ca	a). In no event, however, may a thin the statutory minimum of th apply and will expire SIX (6) MC use the application to become A	reply be timely filed irty (30) days will be considered to NTHS from the mailing date of the	nis communication				
Status									
1) 又	Responsive to communication(s) filed	d on 20 June	e 2005.						
			ction is non-final.						
3)□		•		tters prosecution as to	the merits is				
٠,۵	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Di141		o undor Ex p	ouric Quaylo, 1000 O.	D. 11, 400 O.O. 210.					
	on of Claims								
	Claim(s) <u>1-8 and 10-21</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) is/are allowed.								
	Claim(s) <u>1-8 and 10-21</u> is/are rejected.								
	· · · · · · · · · · · · · · · · · · ·								
8)∟	Claim(s) are subject to restrict	ion and/or e	lection requirement.						
Applicati	on Papers								
9)[The specification is objected to by the	Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11)	The oath or declaration is objected to								
	inder 35 U.S.C. § 119								
	•	fai	indiada	0.440/ \ / \\ \ / \					
_	Acknowledgment is made of a claim fo	or loreign pr	ionly under 35 U.S.C.	§ 119(a)-(d) or (f).					
ад	a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.								
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	=				1.04				
	 Copies of the certified copies o application from the Internation 			received in this Nation	iai Stage				
* S	ee the attached detailed Office action			t raccivad					
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Attachment	` '	•							
1) Notice	e of References Cited (PTO-892)	· • • • • • • • • • • • • • • • • • • •	4) Interview	Summary (PTO-413)					
2) U Notice 3) Inform	e of Draftsperson's Patent Drawing Review (PT nation Disclosure Statement(s) (PTO-1449 or P	U-948) TO/SB/08\		(s)/Mail Date Informal Patent Application (F	PTO-152)				
	No(s)/Mail Date	. 5.05.00,	6) Other:		10-102)				

DETAILED ACTION

The amendment filed 6/20/05 has been considered in preparing this Office action.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-5, 8-11, 14-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's Admitted Prior Art (hereinafter "APA"), Fig. 1 of the drawings and the respective areas of the specification in view of Diaz et al (5,812,789 hereinafter "Diaz") or Belt (5,974,471).

APA teaches a graphics display module (such as, graphics card 14 includes the A/D converter 143, a graphics chip 141 and a local memory 142 for storing input data) for use with an image pickup device (such as, TV turner 15 and A/D converter 143 to convert analog signal into digit signal), a system memory (13) includes an AGP memory (131) for storing graphics data in DMA mode (paragraph 0003) and an image display device (not shown, but is inherent to include a display device in order to display graphics information to a user and is well known in the art to couple to the graphics card 14) in a computer system (Fig. 1), the computer system further comprising a CPU (10) connects to a north bridge chip (11) and a south bridge chip (12). However, APA fails to explicitly teach or suggest, "the graphics display module (or graphics card) further

Art Unit: 2671

includes a data compressing device for compressing the digital image data and data decompressing device for decompressing the compressed image data." These are what Diaz or Belt teaches. Diaz teaches different ways to integrated a compressing and decompressing devices (decoder/encoder 45) into an integrated graphics chip (Fig. 2, 40 and Fig. 4, integrated graphics accelerator 200) and/or a north bridge chip (Fig. 3, integrated core logic chipset 150). Belt also teaches a similar integrated circuit (Figs. 1 and 7) which a compressing and decompressing device (codec 172) can be integrated into a graphics logic (126) and a chipset (106). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of Diaz or Belt into the system of APA in order to compressed the image data before being stored or transmitted and therefore to reduce the bus bandwidth for data transmission and reduce the memory capacity for storing compressed data and increase efficiency of the overall system as taught by Diaz (col. 4, lines 30-57) or Belt (abstract and col. 2, lines 5, to 6 and 40-48). Therefore, at least claims 1-5, 8-11, 14-17 and 19-21 would have been obvious.

3. Claims 6, 7, 12, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's Admitted Prior Art (hereinafter "APA"), Fig. 1 of the drawings and the respective areas of the specification in view of Diaz et al (5,812,789 hereinafter "Diaz") or Belt (5,974,471) as applied to claims 5, 8 and 16 above, and further in view of Langendorf (6,630,936).

The teachings of combined system of APA and Diaz or APA and Belt are given in previous paragraph of this Office action. However, the combined system fails to

explicitly teach or suggest the integrated graphics chip can be further integrated into north bridge core logic chipset. This is what Langendorf teaches (Fig. 4, chipset 200). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of integrated circuit of Langendorf into the combined system of APA and Diaz or APA and Belt in order to further reduce the chip size, reduce power dissipation, to reduce the overall system cost and increase bus bandwidth and overall system performance. Therefore, at least claims 6, 7, 12, 13 and 18 would have been obvious.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8 and 10-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kee M. Tung whose telephone number is 571-272-7794. The examiner can normally be reached on Tuesday - Friday from 5:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/647,805

Art Unit: 2671

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kee M Tung
Primary Examiner

Art Unit 2671